

IMAGER FOR DNA SEQUENCER

ABSTRACT

An improved method for the sequencing of DNA fragments is provided. The method includes using a known process for DNA fragment separation, such as capillary electrophoresis, and imaging the resultant gel plate with a full-width array scanner or a two-dimensional amorphous silicon image sensor array. The DNA sample is placed within a well of the separation apparatus, such as a capillary tube or plurality thereof. The separation apparatus is then placed in a buffer. An electric field is then applied, forming a bias between the ends along which the sample is separated.

Once separated, the large area detector scans the entire gel plate and resultant image data is provided. By way of the improved method, the entire gel plate can be scanned at the same time and repeatedly, resulting in greater accuracy and a shorter time to sequence.